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DATE: September 1, 2004

TO: U.S. Patent and Trademark Office

ATTENTION: **EXAMINER LAYLA G. LAUCHMAN**

FACSIMILE NO.: (571) 273-2418

FROM: Mark S. Svat, Reg. No. 34,261

RE: Inventors: Kimon D. Roufas, et al.
Application No. 10/016,427
Filed: December 10, 2001
Art Unit: 2877
Last Office Action: December 16, 2003
Attorney Dkt. No.: D/A1131 (XERZ 2 00441)

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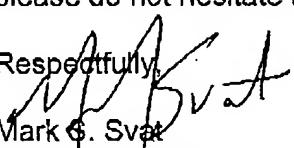
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COMMENTS

Dear Examiner Lauchman,

In accordance with your telephone request of earlier today, attached is the substitute Abstract for the above-identified patent application. If anything further is required, please do not hesitate to let me know.

Respectfully,


Mark S. Svat
Reg. No. 34,261

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SIX DEGREE OF FREEDOM POSITION RANGING

ABSTRACT

[0082] An alignment system includes a first module having a plurality of emitters and a first receiver configuration located on the face of the first module. A second module has a second plurality of emitters and a second receiver configuration located on the face of the second module. First and second trigger signal generators fire the first and second plurality of the emitters. The generated signals are sensed by at least some of the receivers. A converter arrangement obtains and converts the received signals into digital data representative of the readings received by selected receivers. A processing system computes at least one of an absolute six degree offset or a relative six degree offset between the faces. The offset information is then used to achieve a desired alignment between the face of the first module and the face of the second module.